rue or false: Some kinds of "peppercorns" aren't actually pepper at all. It's true. Black peppercorns are a required kitchen staple, and fashionable peppercorn blends are adding white, green and pink peppers as flavor accessories. But not all peppercorns are created equal — or are actually peppercorns at all. But these fakes, known as "false peppercorns," still offer bona fide culinary options.

"True" and "false" peppercorns are similar-looking fruits with different botanical roots — both figuratively and literally. True peppers, from the piperaceae plant family, come from creeper vines, while false peppers come from trees and tubers, some of which are related to ginger, cloves, nuts or citrus, says Hubert Richard, PhD, a lecturer at France's Agricultural and Food Industry Institute of Higher Education in Paris.

The most common true pepper is the black pepper plant, which yields three common peppercorns: black (partially ripe fruit), green (unripe fruit) and white (seeds of ripe fruit). Peppercorn blends typically include these peppers plus one fake: the pink peppercorn.

Pink Peppercorns

These common false peppers were less available in the 1980s. The Food and Drug Administration temporarily banned them due to reports of respiratory and gastrointestinal issues and allergic reactions similar to poison ivy. Pink peppercorns are harvested from the Anacardiaceae sumac plant family that includes pistachios, cashew nuts, mangos and poison ivy, and there have been some reports of nut allergy cross-reactivity.

Pink peppercorns lack the hard shell of other peppercorns. Their papery skin makes them easy to crush between your fingers and, in some culinary applications, just the flaky skin is used. These red flavor jewels also lack piperine — an alkaloid providing black pepper's pungent sensation of heat — offering instead a delicate hint of pepper with juniper and pine accents balanced by sweet, citrus and floral notes. The sweet element is why chefs pair pink peppercorns with pastries and chocolate.

In French cooking, pink peppercorns are popular in fish, scallops, shrimp, lobster, duck, chicken and fruit dishes. They're also a simple way to add color, texture and flavor to salads, smoked salmon and cooked beets.

Jamaican Pepper

Another common false pepper, Jamaican pepper is often used in gingerbread cookies, pumpkin pie and spice cakes. In the 15th century, Spanish explorers in Jamaica mistook a peppercorn-like dried fruit for pepper and called it pimiento. Europeans called it allspice to reflect its versatile blend of subtle pepper notes and hints of clove, nutmeg and cinnamon.

Allspice is a natural complement to fruits in jams, chutneys, marmalades and mincemeat. In beverages, allspice appears in mulled cider or wine, chai tea and some herbal liqueurs such as Benedictine. In meats, allspice is essential in jerk chicken and pairs well with game dishes, patés, chili and sausages. It's commonly included in ketchup, barbecue sauces, marinades, Middle Eastern rice dishes and pickles.

THEY MAY BE SMALL, ROUND AND FIERY, BUT NOT ALL PEPPERCORNS ARE CREATED EQUAL

By Michele Redmond

As with most spices, allspice includes antioxidants, dietary polyphenols and nutrients associated with reducing oxidative stress and risks of developing chronic disease. Still, the small quantities make direct health benefits unclear, yet intriguing. Some health benefits of allspice may be attributed to eugenol, the main constituent; gallic acid for selective anti-tumor properties and glycosides; and polyphenols that exhibit hypotensive, analgesic and anti-neuralgic properties.

Sichuan Peppercorns

Another false pepper, Sichuan peppercorn causes your tongue and mouth to buzz and feel numb due to neurological stimulation from sanshool, an alkylamide. Sanshool stimulates touch and pain receptors on the tongue and mouth and can activate the same neurons in patients who experience tingling and paresthesia from ischemic injury or nerve compression. No wonder this Chinese citrus varietal has been called "the toothache tree."

Sichuan peppers are key to five-spice powder and Kung Pao chicken, but the FDA banned them until 2005 due to a citrus virus concern, so their appearance in recipes is limited. The flavors can be citrusy, floral, minty, earthy and woodsy,

but the primary flavor attributes are physical sensations the brain perceives as a carbonated tingle or heat. This pepper is traditionally paired with chilies and elevates stir-fries, meatballs, meat rubs and vegetable, salmon and shrimp dishes.

Peppercorn Recipe Tips

To maximize peppercorn ingredients when creating and writing recipes, become familiar with peppercorn blends by tasting each type to assess its flavor profile. Pink peppercorn's delicate flavors often are lost in blends, but are potent by themselves. (Although pink peppercorns actually tend to be red in color, don't describe them as such since "red peppercorn" is a rare version of unripe black peppercorns.)

Expand seasoning ingredients and seasonal options by using allspice other than at holidays or by adding a false pepper from the ginger family called Melegueta or Alligator pepper. This pepper (more commonly known as grains of paradise) has aromatic notes of nuts, citrus and cardamom. Mostly used in North Africa and Morocco, particularly in ras al hanout, grains of paradise are becoming more available internationally. More difficult to find is the Tasmanian pepper from Australia which, like Sichuan peppers, causes tingly sensations but is more pungent.

Toasting whole spices often enhances volatile oils and aromatic compounds, but with whole peppercorns, this tends to result in a less pungent flavor. However, toasting and grinding Sichuan peppercorns to mellow their intensity may improve palatability. Whether you're cooking with true or false peppers, grind them

before use, since the volatile aromatic compounds can dissipate after as few as 30 minutes. This is also why pepper flavors change during cooking, and adding more fresh-cracked pepper at the end of cooking or to salads can brighten up foods.

So the next time you pull out the pepper grinder, consider whether true or false peppers best tease the palate and satisfy the appetite.

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